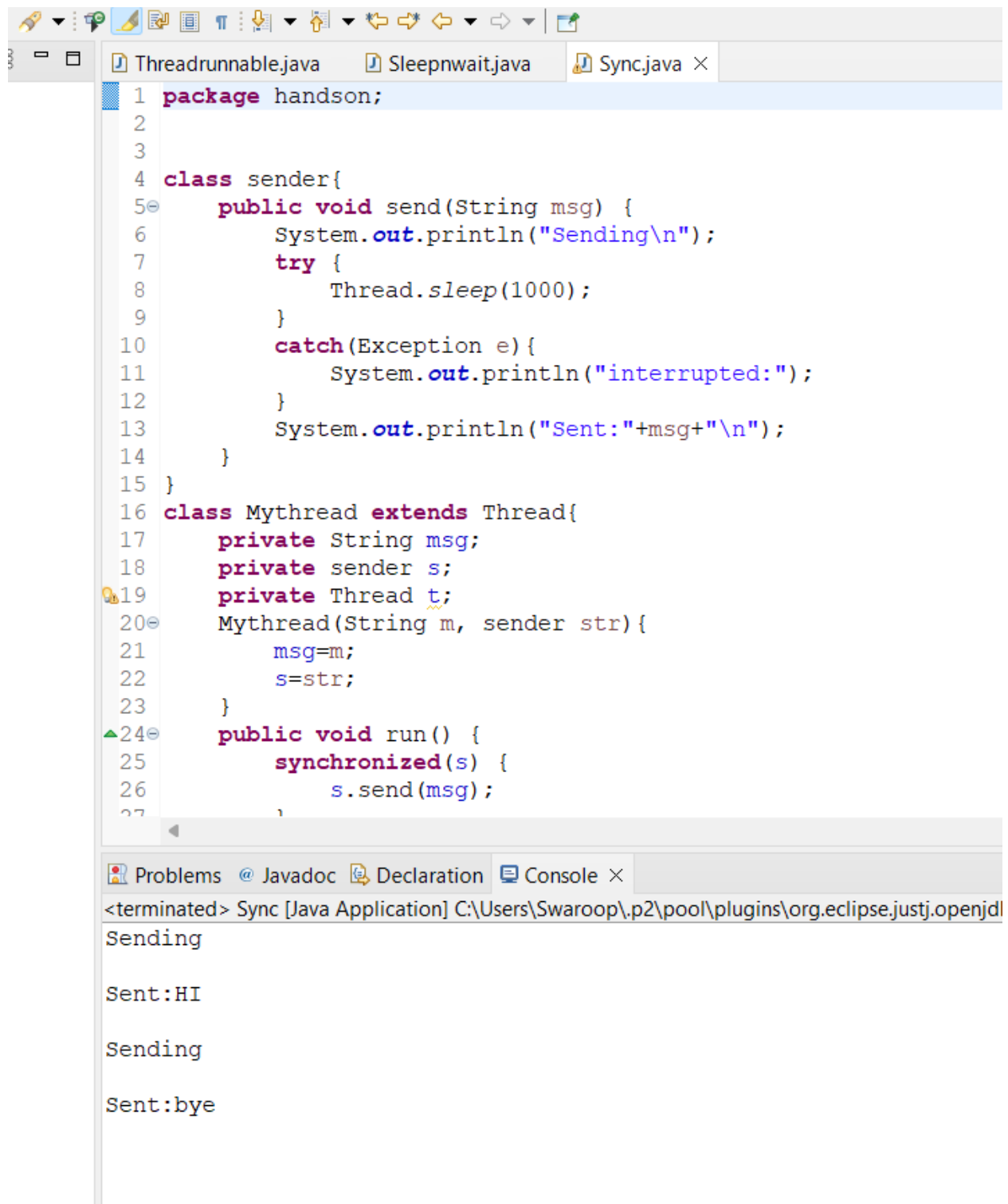


Practice Question-3

```
package handson;
class sender{
    public void send(String msg) {
        System.out.println("Sending\n");
        try {
            Thread.sleep(1000);
        }
        catch (Exception e){
            System.out.println("interrupted:");
        }
        System.out.println("Sent:"+msg+"\n");
    }
}

class Mythread extends Thread{
    private String msg;
    private sender s;
    private Thread t;
    Mythread(String m, sender str){
        msg=m;
        s=str;
    }
    public void run() {
        synchronized(s) {
            s.send(msg);
        }
    }
}

public class Sync {
    public static void main(String[] args) {
        sender st=new sender();
        Mythread mt=new Mythread("HI",st);
        Mythread mt1=new Mythread("bye",st);
        mt.start();
        mt1.start();
        try {
            mt.join();
            mt1.join();
        }
        catch (Exception e) {
            System.out.println("interrupted:");
        }
    }
}
```



The screenshot shows the Eclipse IDE interface. The top toolbar contains icons for running, debugging, and other development tasks. The editor window displays three files: Threadrunnable.java, Sleepnwait.java, and Sync.java. The code in Threadrunnable.java defines a package 'handson', a 'sender' class with a 'send' method that prints 'Sending', sleeps for 1000ms, and prints 'Sent: ' followed by the message, and a 'Mythread' class that extends 'Thread' and implements the 'run' method by synchronizing on the 'sender' object and calling 'send'. The console window at the bottom shows the output of the program, which is terminated, and displays the sequence of messages: 'Sending', 'Sent: HI', 'Sending', and 'Sent: bye'.

```
1 package handson;
2
3
4 class sender{
5     public void send(String msg) {
6         System.out.println("Sending\n");
7         try {
8             Thread.sleep(1000);
9         }
10        catch (Exception e) {
11            System.out.println("interrupted:");
12        }
13        System.out.println("Sent:"+msg+"\n");
14    }
15 }
16 class Mythread extends Thread{
17     private String msg;
18     private sender s;
19     private Thread t;
20     Mythread(String m, sender str){
21         msg=m;
22         s=str;
23     }
24     public void run() {
25         synchronized(s) {
26             s.send(msg);
27         }
28     }
29 }
```

<terminated> Sync [Java Application] C:\Users\Swaroop.p2\pool\plugins\org.eclipse.justj.openjdk

Sending

Sent:HI

Sending

Sent:bye